



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,927	07/10/2003	Louis B. Rosenberg	IMM053A	9912
34390      7590      12/09/2008 PATENT DEPARTMENT (51851) KILPATRICK STOCKTON LLP 1001 WEST FOURTH STREET WINSTON-SALEM, NC 27101				
EXAMINER				
LIANG, REGINA				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
12/09/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/615,927

## Applicant(s)

ROSENBERG ET AL.

## Examiner

Regina Liang

## Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 44-64 and 69-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-64 and 69-73 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)  
Paper No(s)/Mail Date 11/14/08.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application.
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/20/08 has been entered. Claims 44-64, 69-73 are pending in the application.

### *Double Patenting*

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 44-64, 69-73 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-67 of U.S. Patent No. 5,956,484. Although the

conflicting claims are not identical, they are not patentably distinct from each other because the invention defined in the claims at issue is broader version of the invention defined in the claims of the patent.

The following is an example for comprising claim 70 of this application and claim 1 of patent.

claim 70 of this application	Claim 1 of patent
A computer-readable medium comprising program code to cause a processor to perform the steps of:	A method for providing force feedback over a network comprising:
	establishing a connection between a server machine and a client machine over a network, said client machine including a visual display and a human/computer interface device providing computer-controlled physical force feedback to a user of said human/computer interface device;
receive a web page comprising embedded force feedback information from a network interface;	<b>receiving</b> from said server machine over said network <b>web page information</b> , said <b>web page information including</b> screen display information representing a visual layout of a web page and <b>force feedback information</b> related to said visual layout of said web page information;
generate a virtual environment based at least in part on the web page;	<b>displaying on said visual display</b> of said client machine said web page based upon said screen display information;
	receiving information from said human computer interface device for positioning a pointer image with respect to said visual layout of said web page;
execute a force feedback driver software, the force feedback driver software configured to interpret the embedded force feedback information, and	<b>providing a force feedback signal</b> that is based upon said input information and <b>based upon said web page information</b> received over said network; and
transmit a force feedback signal configured to cause an actuator to generate a haptic feedback effect, the peripheral signal based at least in part on the haptic feedback information.	directing said human/computer interface device <b>to output computer-controlled physical force feedback to said user</b> correlated with said visual layout of said web page on said

	visual display, said force feedback being based upon said force-feedback signal.
--	--

As can be seen above, claim 70 of this application is broader version of patent claim 1.

4. Claims 44-64, 69-73 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-40 of U.S. Patent No. 6,101,530. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention defined in the claims at issue is broader version of the invention defined in the claims of the patent.

The following is an example for comprising claim 70 of this application and claim 1 of patent.

claim 70 of this application	Claim 1 of patent
A computer-readable medium comprising program code to cause a processor to perform the steps of:	A computer-readable medium including program instructions for implementing force feedback over a network, the program instructions performing acts comprising:
	causing a connection to be established between a server machine and a client machine over a network, said client machine including a visual display and a force feedback device providing computer-controlled physical force feedback to a user of said force feedback device;
receive a web page comprising embedded force feedback information from a network interface;	<b>receiving</b> from said server machine over said network <b>web page information</b> , said <b>web page information</b> including screen display information representing a visual layout of a web page and <b>force feedback information</b> related to said visual layout of said web page;
generate a virtual environment based at least in part on the web page;	<b>causing a display of said web page</b> based upon said screen display information, said display provided on said visual display device of said client machine;
	receiving input information from said force

	feedback device for positioning a pointer image with respect to said visual layout of said web page; and
execute a force feedback driver software, the force feedback driver software configured to interpret the embedded force feedback information, and	<b>causing a force feedback signal to be output to said force feedback device, said force feedback signal based upon said input information and based upon said web page information received over said network,</b>
transmit a force feedback signal configured to cause an actuator to generate a haptic feedback effect, the peripheral signal based at least in part on the haptic feedback information.	<b>wherein said force feedback signal causes said force feedback device to output computer-controlled physical force feedback to said user correlated with said visual layout of said web page on said visual display device, said force feedback being based at least in upon said force feedback signal.</b>

As can be seen above, claim 70 of this application is broader version of patent claim 1.

5. Claims 44-64, 69-73 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No.6,125,385. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention defined in the claims at issue is broader version of the invention defined in the claims of the patent.

The following is an example for comprising claim 70 of this application and claim 1 of patent.

claim 70 of this application	Claim 1 of patent
A computer-readable medium comprising program code to cause a processor to perform the steps of:	A method for providing force feedback over a network comprising:
	establishing a connection between a server machine and a client machine over a network, said client machine including a visual display and an interface device providing computer-controlled physical force feedback to a user of

	said interface device;
receive a web page comprising embedded force feedback information from a network interface;	<b>receiving web page information</b> from said server machine over said network, said <b>web page information including</b> screen display information representing a visual layout of a web page and <b>force feedback information</b> related to providing a feel sensation correlated with said visual layout;
generate a virtual environment based at least in part on the web page;	<b>displaying on said visual display</b> of said client machine said web page based upon said screen display information;
	receiving input information from said human computer interface device for positioning a displayed cursor with respect to said visual layout of said web page;
execute a force feedback driver software, the force feedback driver software configured to interpret the embedded force feedback information, and	<b>providing a force feedback signal</b> that is based upon said input information and <b>based upon said web page information</b> received over said network wherein said force feedback information includes a call to a force feedback program running on said client machine that provides said force feedback signal, wherein said force feedback program running on said client machine is an ActiveX Control, said ActiveX control being a force only ActiveX control able to output force feedback signals for different force effects to said interface device,
transmit a force feedback signal configured to cause an actuator to generate a haptic feedback effect, the peripheral signal based at least in part on the haptic feedback information.	said force feedback signal being received by said interface device, <b>wherein said interface device outputs computer-controlled physical force feedback to said user</b> correlated with said visual layout of said web page on said visual display, said force feedback being based upon said force feedback signal.

As can be seen above, claim 70 of this application is broader version of patent claim 1.

6. Claims 44-64, 69-73 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-52 of U.S. Patent No. 6,161,126. Although the

conflicting claims are not identical, they are not patentably distinct from each other because the invention defined in the claims at issue is broader version of the invention defined in the claims of the patent.

The following is an example for comprising claim 70 of this application and claim 1 of patent.

claim 70 of this application	Claim 1 of patent
A computer-readable medium comprising program code to cause a processor to perform the steps of:	A method for providing force feedback over a network comprising:
	Causing a connection to be established between a server machine and a client machine over a network, said client machine including a visual display and an interface device providing computer-controlled physical force feedback to a user of said interface device;
receive a web page comprising embedded force feedback information from a network interface;	<b>receiving web page information</b> from said server machine over said network, said <b>web page information including</b> screen display information representing a visual layout of a web page and <b>force feedback information</b> related to providing a feel sensation correlated with said visual layout;
generate a virtual environment based at least in part on the web page;	<b>causing a display of said web page based upon said screen display information</b> , said display provided on said visual display device of said client machine;
	receiving input information from said interface device for positioning a displayed cursor with respect to said visual layout of said web page;
execute a force feedback driver software, the force feedback driver software configured to interpret the embedded force feedback information, and	<b>causing a force feedback signal to be output to said interface device</b> , said force feedback signal based upon said input information and based upon said web page information received over said network, wherein said causing said force feedback signal to be output includes a call to a force feedback program running on said client machine that provides said force feedback signal received by said interface



transmit a force feedback signal configured to cause an actuator to generate a haptic feedback effect, the peripheral signal based at least in part on the haptic feedback information.	device, wherein <b>said interface device outputs computer-controlled physical force feedback to said user</b> correlated with said visual layout of said web page on said visual display device, said force feedback being based upon said force feedback signal.
---	--

As can be seen above, claim 70 of this application is broader version of patent claim 1.

7. Claims 44-64, 69-73 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 28 of U.S. Patent No.6,353,850. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention defined in the claims at issue is broader version of the invention defined in the claims of the patent.

The following is an example for comprising claim 70 of this application and claim 1 of patent.

claim 70 of this application	Claim 1 of patent
A computer-readable medium comprising program code to cause a processor to perform the steps of:	A method for providing force effects for a web page, the method comprising:
receive a web page comprising embedded force feedback information from a network interface;	<b>determining which of a plurality of web page objects</b> are to be associated with at least one force effect,
generate a virtual environment based at least in part on the web page;	<b>said web page objects to be displayed</b> in said web page, wherein said web page is derived from web page information received from a server machine over a network, said web page information including screen display information representing said web page objects;
	selecting a force effect to associated with a particular web page object based on a type of

	said particular web page object and based on a mapping that associates said type of web page object with said force effect, said mapping being stored on a client machine that received said web page; and
execute a force feedback driver software, the force feedback driver software configured to interpret the embedded force feedback information, and transmit a force feedback signal configured to cause an actuator to generate a haptic feedback effect, the peripheral signal based at least in part on the haptic feedback information.	<b>sending a force signal to a force feedback interface device</b> when a user-controlled cursor interacts with said particular web page object, said cursor and said force web page objects being displayed on said web page by said client machine, wherein <b>said force signal is output to an actuator of a force feedback interface device</b> coupled to said client machine to cause a force sensation to a user of said force feedback interface device, and wherein said force signal is based on said force effect.

As can be seen above, claim 70 of this application is broader version of patent claim 1.

8. Claims 44-64, 69-73 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No.6,859,819. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention defined in the claims at issue is broader version of the invention defined in the claims of the patent.

The following is an example for comprising claim 70 of this application and claim 1 of patent.

claim 70 of this application	Claim 1 of patent
A computer-readable medium comprising program code to cause a processor to perform the steps of:	A method for implementing force feedback over a network, the method comprising:
	enabling an establishment of a connection between a server machine and a client machine over a network, said client machine including a

	visual display and a force feedback device providing, computer controlled physical force feedback to a user of said force feedback device;
receive a web page comprising embedded force feedback information from a network interface;	<b>enabling reception of web page information</b> from said server machine over said network, said <b>web page information including</b> screen display information representing a visual layout of a web page and <b>force feedback information</b> related to said visual layout of said web page;
generate a virtual environment based at least in part on the web page;	<b>enabling a display of web page on said visual display</b> of said client machine based upon said screen display information;
	enabling reception of input information from said force feedback device for positioning, a pointer image with respect to said visual layout of said web page;
execute a force feedback driver software, the force feedback driver software configured to interpret the embedded force feedback information, and	<b>enabling a force feedback signal to be output to said force feedback device</b> , said force feedback signal based upon said input information and <b>based upon said web page information</b> received over said network,
transmit a force feedback signal configured to cause an actuator to generate a haptic feedback effect, the peripheral signal based at least in part on the haptic feedback information.	wherein <b>said force feedback information causes said force feedback device to output computer controlled physical force feedback to said user</b> correlated with said visual layout of said web page on said visual display, said force feedback being based upon said force feedback signal.

As can be seen above, claim 70 of this application is broader version of patent claim 1.

***Response to Arguments***

9. Applicant's arguments with respect to claims 44-64, 69-73 have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Regina Liang/  
Primary Examiner, Art Unit 2629